

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
30 June 2005 (30.06.2005)

PCT

(10) International Publication Number
WO 2005/059116 A1

(51) International Patent Classification⁷: C12N 5/02

(21) International Application Number:
PCT/EP2004/014016

(22) International Filing Date: 8 December 2004 (08.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PA 2003 01809 8 December 2003 (08.12.2003) DK

(71) Applicant (for all designated States except US): **CEL-
LARTIS AB** [SE/SE]; Arvid Wallgrens Backe 20, S-413
46 Göteborg (SE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LINDAHL, Anders**
[SE/SE]; Bergtallsvägen 2, S-436 40 Askim (SE). **KARLS-
SON, Ulrika** [SE/SE]; Ostindiegatan 19B, S-414 52 Göte-
borg (SE).

(74) Agent: **JOHANSEN, Marianne**; Albihtns A/S, H.C. An-
derssens Boulevard 49, DK-1553 Copenhagen V (DK).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: METHODS FOR CLONAL DERIVATION OF HUMAN BLASTOCYST-DERIVED STEM CELL LINES

(57) Abstract: Human blastocyst-derived stem cells (hBS) or hBS derived cells, such as, e.g., cells of endodermal, mesodermal, and ectodermal origin, are pluripotent cells with widespread potentials within the areas of e.g. therapeutic treatment, human developmen-
tal biology, and drug discovery processes. The present invention relates to a method for clonal derivation of human blastocyst-derived stem cells (hBS) or hBS derived cells. According to the present invention hBS cell colonies or hBS derived cell colonies are subjected to non-enzymatic treatment for dissociation of the cell colonies to one or more single cells, which are then separately cultivated in a serum based medium and/or serum based conditioned medium to obtain one or more cell clones capable of forming colonies.

WO 2005/059116 A1